die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap; and wherein

said apparatus satisfies:

$$0.05G < H < 0.5G$$

wherein H is the height of said protrusion, and G is the distance of the gap between said first and second coating dies.

A1 cont'd

said protrusion having a tapered surface extending from said lower face of said coating die, and said tapered surface being inclined with respect to a surface ⊥ to said lower end face vertical surface, with a mold angle so that the top of said protrusion is narrower in comparison with a root of said protrusion

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5. (Amended) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, said apparatus comprising:

a first coating die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

A2

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap, and said protrusion is shaped like a circular truncated cone, wherein said apparatus satisfies:

$$0.05G < H < 0.5G$$
$$(D_2 - D_1)/2 < W < G$$
$$0.01\ mm \leq L < W$$

where H is the height of the circular truncated cone of said protrusion, W is the distance between the outer periphery of the bottom portion of said circular truncated cone and the inner peripheral face of said first die hole, L is the distance between the outer periphery of the head portion of said circular truncated cone and the inner peripheral face of said first die hole, D_1 is the inner peripheral face diameter of said first die hole on the outlet side of said optical fiber, D_2 is the inner peripheral face diameter of said second die hole on the inlet side of said optical fiber, and G is the distance of the gap between said first and second coating dies.

A2 cont'd

See the attached Appendix for the changes made to effect the above claims.

Please add the following new claim(s):

10. (New) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, said apparatus comprising:

a first coating die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

A3

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap, and said apparatus satisfying

$$(D_2 - D_1)/2 < W < G$$

W is the distance between the outer periphery of the bottom portion of said circular truncated cone and the inner peripheral face of said first die hole, D_1 is the inner peripheral face diameter of said first die hole on the outlet side of said optical fiber, D_2 is the inner peripheral

face diameter of said second die hole on the inlet side of said optical fiber, and G is the distance of the gap between said first and second coating dies.

11. (New) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, said apparatus comprising:

a first coating die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap, and said apparatus satisfying

$$0.01\ mm \leq L < W$$

where W is the distance between the outer periphery of the bottom portion of said circular truncated cone and the inner peripheral face of said first die hole and L is the distance between the outer periphery of the head portion of said circular truncated cone and the inner peripheral face of said first die hole.

12. (New) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, said apparatus comprising:

a first costing die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap, and said apparatus satisfying:

$$0.05G < H < 0.5G$$
$$(D_2-D_1)/2 < W < G$$

where H is the height of the circular truncated cone of said protrusion, W is the distance between the outer periphery of the bottom portion of said circular truncated cone and the inner peripheral face of said first die hole, D_1 is the inner peripheral face diameter of said first die hole on the outlet side of said optical fiber, D_2 is the inner peripheral face diameter of said second die hole on the inlet side of said optical fiber, and G is the distance of the gap between said first and second coating dies.

A3 cont'd

13. (New) An optical fiber coating apparatus for applying first and second coating resins as a laminate to the outer periphery of an optical fiber, said apparatus comprising:

a first costing die having a first die hole through which said optical fiber is inserted and a basically disk-shaped lower end face with a protrusion projecting in the passing direction of said optical fiber and formed around said first die hole, said first die hole and the outer periphery of said optical fiber therein forming a space therebetween into which said first coating resin is injected; and

a second coating die having a second die hole which is concentric with said first die hole and through which said optical fiber passed through said first die hole is inserted and an upper end face comprising a circular plate opposing the lower end face of said first coating die so as to form a gap through which said second coating resin is injected into a space formed between said second die hole and the outer periphery of said optical fiber therein;

said protrusion being formed so as to reduce an annular lower-pressure region formed around said optical fiber in a flow of said second coating resin within said gap, and said apparatus satisfying:

$$0.05G < H < 0.5G$$

$$0.01\ mm < L < W$$

where H is the height of the circular truncated cone of said protrusion, W is the distance between the outer periphery of the bottom portion of said circular truncated cone and the inner peripheral face of said first die hole, L is the distance between the outer periphery of the head portion of said circular truncated cone and the inner peripheral face of said first die hole, and G is the distance of the gap between said first and second coating dies.